

with their parents invited to participate in this study from 10 health centers and 11 health stations in Qazvin. Data from a total of 779 at 6 months and 551 at 12 months for children aged 6–30 months and their parents were analyzed.

**Results:** Our data showed 98% of infants were breastfed and 91.2% were exclusively breastfed at one month of age. Maternal education was negatively associated with exclusive breast-feeding at 1 and 2 months of age. A significant positive trend was observed between the number of children and exclusive breast feeding. At 3,4,5 and 6 months of age the odds of exclusive breast-feeding were significantly lower for low birth weight compared with normal weight infants. Maternal and paternal education,maternal job and sex of baby were significantly associated with breast-feeding at 6 months. Maternal education turned out to be the most stable variable as it was significantly associated with breast-feeding at all ages.

**Conclusion:** Our data shows that infants in Qazvin,Iran,have desirable situation in terms of exclusive breast feeding and breast-feeding. Maternal and paternal education,maternal job and sex of baby are predictors for duration of breast feeding.

**Keywords:** exclusive breast-feeding,duration,determinants

#### **Determination the effects of boron supplement on systemic symptoms associated with primary dysmenorrhea, need to analgesic and disruption in daily activity**

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**Background:** Primary dysmenorrhea is one of the most common problems of women,that treatment is non steroidal anti inflammatory drugs. Based on the anti-inflammatory effects of boron supplement this study was to determine the effects of boron supplement on systemic symptoms associated with primary dysmenorrhea,need to analgesic and disruption in daily activity.

**Methods:** A triple blind clinical trial was conducted on 113 students. Samples after matching the intensity of dysmenorrhea were randomly divided into two groups . For boron group (n = 58) was administered one capsules containing 10 mg of boron for a period of 2 days prior to the third day of bleeding and placebo group (n = 55) threated with similar capsules containing lactose with the same instruction. Systemic symptoms were compared and follow-up with verbal multidimensional questionnaires. Data obtained were analyzed by using Friedman test,Mann-Whitney,Wilcoxon and Fisher.

**Results:** In both groups,the systemic symptoms of dysmenorrhea,need for analgesics,disruption in daily activities decreased after the intervention than before the intervention,except in cases of diarrhea this decrease was statistically significant in after intervention between the two groups (p<0.05). Conclusion: According to the results,boron supplement were effective in reducing systemic symptoms associated with dysmenorrhea,work dysfunction and need for analgesic. Further studies are recommended with boron supplement to find more applications in obstetrics and gynecology. Keywords: Systemic symptoms of of dysmenorrhea, boron supplement analgesic.

**Keywords:** dysmenorrhea systemic symptoms, boron supplement, analgesic

#### **★ Effect of olive oil with low calorie diet on blood lipids in hyperlipidemic patients ★**

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**Background:** Serum lipid abnormality is a risk factor for cardiovascular disease. The aim of this research was to study the effect of olive oil with low-calorie diet on blood lipids in hyperlipidemic patients.

**Methods:** The study was done on fifty eight hyperlipidemic patients of both sexes and age range of 25–65 years. The patients received low-calorie diet based on 1400 kcal energy per day for 4 weeks,containing 32% fat,18% protein and 50% carbohydrate. The intervention group received low-calorie diet including 30 g/d olive oil. Results: Weight,body mass index,waist and hip circumferences were significantly reduced (P<0.05) after 4 weeks in both groups. Treatment with olive oil was associated with a significant reduction (P<0.05) in low density lipoprotein.

**Conclusions:** According to the results,we can state that olive oil with low calorie diet,as a part of healthy diet,had beneficial effect on decreasing serum LDL,and may reduced the cardiovascular risk factor in hyperlipidemic patients.

**Keywords:** Olive oil, low calorie diet, hyperlipidemia

#### **The knowledge, attitude and practice of health care staff about lactation nutrition in Ajabshir and Bonab**

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**Background:** Nutritional knowledge is one way to achieve proper and balanced nutrition in whole life. Since lactating women are vulnerable groups of community,nutrition in this period plays significant role in maternal and infant health. As mothers get most of their information from health centers and the knowledge of the staff in health centers on nutrition during lactation is necessary for proper education,in this study,nutritional knowledge of health care staff was investigated in Ajabshir and Bonab city.

**Methods:** In this study,sixty staff randomly selected from health care centers in Ajabshir and Bonab cities. In order to assess the knowledge on nutrition during lactation,staff completed a questionnaire containing 10 questions. For evaluation,the questionnaire was adjusted based on 20 scores and subjects was divided into three groups with poor,average and good knowledge based on the scores on the questionnaire. SPSS software program was applied for data analyzing.

**Results:** The results showed that in Ajabshir city,57% of staff had good knowledge on nutrition during lactation,33% had moderate knowledge and awareness of 10% was poor. In Bonab city,43% of staff had good knowledge on nutrition during lactation,37% had moderate knowledge and awareness of 20% was poor.

**Conclusion:** According to the results,most of the health care staff had proper knowledge on nutrition during lactation. Given the importance of nutrition in lactation and the need for proper education to mothers,and since a significant percentage of the staff did not have adequate knowledge of nutrition during lactation,training courses for health care workers is essential in this regard.

**Keywords:** Knowledge, Lactation, health care staff, West Azarbaijan

#### **Evaluation of breast milk total antioxidant capacity (TAC) levels in third and fourth months of lactation**

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